



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBST2120-15
Job Sheet 199075



Part No: RBST2120-15

Job Qty: 2 pcs

Part Name: Locating Pin



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 8/12/19

Job Tracking No:

Due Date: 8/26/19

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: RBST2100 REV.7 IPP REV:A 18.01.31 NEW ISSUE JFC VERF:DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	SL-154 - 1	2 pcs	8/26/19	8/26/19	1.00	0.50	SL-154 - 1		19/08/19
120	QC 2	2 pcs	8/26/19	8/26/19	0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		19/08/19
							QC 2 - 35		
							QC 2 - 39		
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		
							QC 2 - 66		
							QC 2 - 64		
							QC 2 - 65		



Container No: S205486



Part: RBST2120-15

Job No: 199075

Serial No/Batch: S205486

Revision: 7

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 08/14/19

130 QC 8	2 pcs	8/26/19	0.00 0.00	QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 8 - 12	
				QC 8 - 14	
				QC 8 - 17	
				QC 8 - 20	19-08-14
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
150 Outsource - 12 - Black Oxide	2 pcs	8/26/19		GRO002-VC	15
160 Packaging 2-1 - Receive - B4B	2 pcs	8/26/19	0.00 0.00	Packaging 2 - 1 - B4B	AUG 2 2 2019
5 pcs				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
				Packaging 2 - 14 - B4B	
				Packaging 2 - 15 - B4B	
				Packaging 2 - 16 - B4B	
				Packaging 2 - 17 - B4B	
				Packaging 2 - 18 - B4B	
				Packaging 2 - 19 - B4B	
				Packaging 2 - 20 - B4B	
				Packaging 2 - 21 - B4B	
				Packaging 2 - 22 - B4B	
				Packaging 2 - 23 - B4B	
				Packaging 2 - 24 - B4B	
				Packaging 2 - 25 - B4B	
				Packaging 2 - 26 - B4B	
				Packaging 2 - 27 - B4B	
				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	

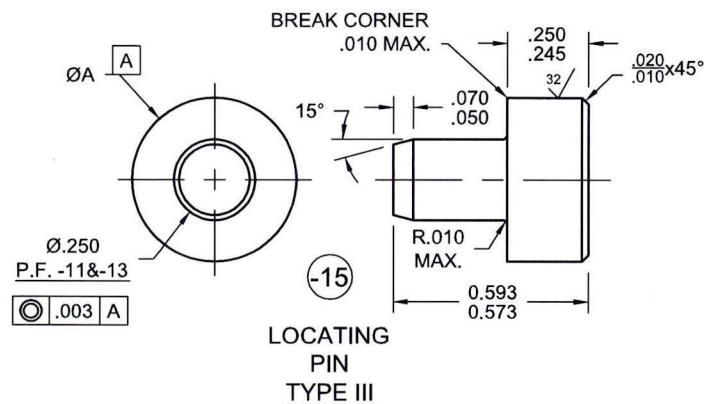
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				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
170 QC 6	2 pcs	8/26/19	0.00 0.00	QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	
				QC 6 - 40	ATTG 2 2 2019 DAS 40
				QC 6 - 81	9-89
180 Packaging 3-1 - Stock - B4B	2 pcs	8/26/19	0.00 0.00	Packaging 3 - 1 - B4B	
				Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	DAS
				Packaging 3 - 6 - B4B	28
				Packaging 3 - 7 - B4B	9-89
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	
				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
210 QC 21 - SA	2 pcs	8/26/19	0.00 0.00	QC 21 - SA - 21	AUG 2 3 2019 DAS 70
				QC 21 - SA - 70	9-89
				QC 21 - SA - 53	9-89
Part Op 110 - MORI SL-154 LATHE -1-Machine as per FOLIO FB799. FOLIO REV: <u>AA</u> DWG REV: <u>7</u> 2- Descriptions: Deburr 120 - QC2- Inspect parts off machine FAI/FAIB 130 - QC8- Inspect parts - second check 150 - -Issue P/O to Groupe Altech; PO <u>44272</u> -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required 160 - Receive & Inspect for Damage & Mat'l Certs 170 - QC6- All purchased or subcontracted products 180 - Identify as per dwg & Stock Location: _____ 210 - QC21- Final Inspection - Work Order Release					

Job BOM				
Part / Item	Component Name	Quantity	Operation	Container
M1018R0.375	1010-1025 Round Bar .375	.1400 ft (.07 ea)	110-SL-154 - 1	5039965
Job Allocations				
Operation	Component Part	Required	Inventory	Allocated
110-SL-154 - 1	M1018R0.375	0	16	0
Part Specifications				
Specifications could not be found.				

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REVISIONS				
REV	DESCRIPTION	DATE	INITIAL	APPROVED
1	ADDED NOTE TO -1 BODY TO INSPECT BEFORE HEAT TREATING, ALSO CHANGED TOL., OF -1 ROLLER FIXTURE'S ØB, ØC, & ØE FROM +.002 -.000.	2/11/08	WP	DW
2	-15 CH'D LOCATING PIN TOLERANCE FROM Ø.2480 Ø.2475 TO Ø.250 P.F. -11 & -13. -11 & -13 CH'D FROM Ø.247 Ø.246 TO REAM Ø.290. REMOVED MS14102 & MS14104 CHAMFERED BEARINGS FROM LIST.	2/19/08	WP	GE
3	ADDED KST2128 & KST2162. -13 REMOVED 25° ANGLE FROM SECONDARY SEAT AND DELETED ØB DIMENSION. ADDED QTY TO -13 & -15 CHART.	4/22/08	WP	DW
4	-5 CH'D ROLLER RADIUS FROM .005 - .010, TO .015 - .020, -9 PIN RADIUS FROM .015 MAX., TO .015 MIN. CH'D -7 SLEEVE TO -7 GUIDE.	7/7/08	WP	DW
4A	CH'D T/N FROM KST2100.	11/19/09	RJC	
5	CORRECTED ERROR -3 WAS .165 NOW .172 FOR ROLLER CLEARANCE. ADDED REVISIONS TO ALL PAGES.	1/18/10	WP	DW
6	-15 DELETED LOCATING PIN TYPE I PER. R.W.	9/10/13	CFS	GE
7	-15 RBST2128 CH'D MATERIAL SIZE FROM Ø5/8 X 5/8 TO Ø3/4 X 5/8 & RBST2162 FROM Ø3/8 X 5/8 TO Ø1/2 X 5/8.	11/5/13	JAG	GE



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RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 199075
MCS
19-08-12

NOTES:

- BREAK ALL SHARP CORNERS (.015/.03).

TOOL #	ØA +.000 -.002	PIN TYPE	QTY.	MATERIAL
RBST2120	.310	III	2	1018 RND. BAR Ø3/8 x 5/8
RBST2128	.622	III	1	1018 RND. BAR Ø3/4 x 5/8
RBST2162	.372	III	1	1018 RND. BAR Ø1/2 x 5/8

RED BARN MACHINE	
TITLE RBST2100 SERIES TRI-ROLLER SWAGING TOOL; LOCATING PIN	
DWG NO. TOOL# (see chart)-15	REV 7
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: DECIMALS .XX ± .005 FRACTIONS ± 1/32 ANGLES ± 5°	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING	
SCALE NTS	DATE 1-23-08
SHEET 9 of 9	

Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation			Disposition		
			Completed By		
			Lead hand / Supervisor		
			QC / QA Coordinator		
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Dart Aerospace Ltd.
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K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB044272



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB044272

PO Date: 8/15/19

Due Date: 8/23/19

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2019-08-16

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	197183	RB6872882-1	Adjusting Screw -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	8/23/19	4 pcs	0 pcs	4 pcs	\$2.35/pcs	\$9.40

4 X AUG 22 2019

5199376



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PURCHASE ORDER

POHB044272



Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
2	196746	RBW109-3130-53-113-3	Pin -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-C-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 1018 -Certificate of Conformity is required	Firmed	-	8/23/19	12 pcs	0 pcs	12 pcs	\$2.35/pcs	\$28.20
							12 x	AUG 22 2019			
											5203982
3	197461	RBE350A93-3317-20	Tail Rotor Hub Insert Tool Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	-	8/23/19	20 pcs	0 pcs	20 pcs	\$5.41/pcs	\$108.20
							20 x	AUG 22 2019			
											5200134
4	199087	RBE350A93-3303-02-3	Extractor Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required	Firmed	-	8/23/19	19 pcs	0 pcs	19 pcs	\$2.65/pcs	\$50.35



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PURCHASE ORDER
POHB044272



Items											
Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
5	198324	RBW6521A00138-W142AH-3T-3	Top Brace -Issue P/O; _____ -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL-PRF-16173 Grade 3 Class 1 or MIL-c-81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 4140 -Certificate of Conformity is required	Firmed	-	8/23/19	4 pcs	0 pcs	4 pcs	\$3.70/pcs	\$14.80
							4 X AUG 22 2019				



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PURCHASE ORDER

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Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
8	197189	RB6872882-9	Handle Weldment Outside Processing - Black Oxide -Issue P/O; -Black oxide finish, MIL-C-13924C Class 1 -Apply thin layer of oil/CPC per MIL- PRF-16173 Grade 3 Class 1 or MIL-c- 81309 Type III Or MILL-C23411A or MIL-PRF-81309 and wipe off excess. -Material type; 1018 -Certificate of Conformity is required	Firmed	-	8/23/19	3 pcs	0 pcs	3 pcs	\$0.95/pcs	\$2.85
3 X AUG 22 2019 S 205327											
Grand Total:											\$230.30

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Plex 8/16/19 9:01 AM Dart.Guerin.Kimberley



Certificat de Conformité / Certificate of Compliance

(021617-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupaltech.com

Bon de Livraison / Packing Slip

021617 - 1

Livré à / Ship to

DART AEROSPACE LTD

1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA

Tel.: 613-632-5200 Fax:.

Client / Customer:

DART AEROSPACE LTD

1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA

BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
21-Aug-2019		Jigar Patel				POHB044272 ✓			
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Quantités / Quantities Qté NC/ NC Qty		Qté Scrap/	À venir/ Back Order
1	RB6872882-1 ✓ Rev.	RB6872882-1 01-OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY A THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS MAT TYPE; 4140	OXIDE-BLACK CH	4	4 ✓	0	0	0	
2	RBW109-3130-53-113-3 ✓ Rev.	RBW109-3130-53-113-3 01-OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY A THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS MAT TYPE; 4140	OXIDE-BLACK CH	12	12 ✓	0	0	0	
3	RBE350A93-3317-20 ✓ Rev.	RBE350A93-3317-20 01-BLACK OXIDE FINISH, MIL-C-13924C, CLASS 1	BLACK-OXIDE CH	20	20 ✓	0	0	0	
5	RBW6521A00138-W142AH-3T-3 ✓ Rev.	RBW6521A00138-W142AH-3T-3 01-OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY A THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS MAT TYPE; 4140	OXIDE-BLACK CH	4	4 ✓	0	0	0	
6	RBST2120-15 ✓ Rev.	RBST2120-15 BLACK OXIDE FINISH, MIL-C-13924C, CLASS 1	BLACK-OXIDE CH	5	5 ✓	0	0	0	
7	RBST2120-9 ✓ Rev.	RBST2120-9 BLACK OXIDE FINISH, MIL-C-13924C, CLASS 1	BLACK-OXIDE CH	5	5 ✓	0	0	0	
8	RB6872882-9 ✓ Rev.	RB6872882-9 01-OXIDE-BLK & OIL [OXIDE BLACK AND OIL] MIL-C-13924C CLASS 1 APPLY A THIN LAYER OF OIL/CPC PER MIL-PRF-16173 GRADE 3 CLASS 1 OR MIL-C-81309 TYPE III OR MILL-C23411A OR MIL-PRF-81309 AND WIPE OFF EXCESS MAT TYPE; 1018	OXIDE-BLACK CH	3	3 ✓	0	0	0	

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AUG 21 2019

DART AEROSPACE LTD.

DAS
40
9-89

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Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By	Transport / No de Compte Courier / Acc. No.	Bon de commande Client Customer Purchase Order No.				
21-Aug-2019		Jigar Patel		POHB044272				
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)	CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir / Back Order

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.